Claim rejections –35 USC 112.

The subject matter of the invention is

A method for the cogeneration of Heat and Power where one or more independent from the heat consuming process Electricity Generating Devices ………send their exhaust gases in the firing region …………of a kiln ……… after all these exhaust gases having increased their temperature by cooling the fired material …………… exiting the firing region ……… of ……… the kiln and are used as oxidiser to support the combustion of additional fuel in …….. the kiln ………….

When concentrating the above claim 1 the result is

A method for the cogeneration of Heat and Power where one or more independent from the heat consuming process Electricity Generating Devices send their exhaust gases in the firing region of a kiln after all these exhaust gases having increased their temperature by cooling the fired material exiting the firing region of the kiln and are used as oxidiser to support the combustion of additional fuel in the kiln.

By deleting some of the words of claim 1 the subject matter is now clear and definite according to 35 USC 112.
The deleted words were used in claim 1 to serve the purpose of different terminology used in the industry e.g kiln/furnace, combustion room/firing region etc.

Fired material means the hot material which is processed in the kiln or the furnace and is exiting the firing region. It is the common terminology used in the ceramics, cement and generally inorganic products industry. More can be found for this in the description –page 6, line 15 - where this term is again explained.

Claim rejections –35 USC 102

Sturgill (4,528,012) uses clean air and not turbine exhaust gases for oxidizer in the glass furnace and his turbine has to be stopped if the process is stopped i.e the operation of the turbine in Sturgill is not independent from the heat consuming process. In our application we use turbine

exhaust gases and not clean air. This imposes several important differences not only on the process itself but also to the equipment to be used to set up the process.
Lines 31-56 and 5-24 col.11 of Sturgill confirm the above. Please see at col 11: "Ambient air ....." All the above are also confirmed by the drawings of Sturgill.

The above are explained in details in our description. See lines 14-33 page 4 in our description.

All our claims 2-7 have to do with reheated TEG –Turbine exhaust gases- as they are depended from our claim 1 and not clean air as in Sturgill and as such nave no relationship with the subject of Sturgill.

Claim rejections –35 USC 103

Lee (5,247,907) uses TEG as oxidizer in the burners. See lines 12-15 col 2 and their drawing. This TEG is also enriched with oxygen or air, see line 30-33 col 5. Lee however does not increase the TEG or mixture temperature at higher temperature than its exit from the turbine. As such Lee has no relationship with our inventive step. Moreover Lee uses the TEG in the burners and not in the firing room. Our inventive step i.e. the increase of the TEG temperature and the used of all the reheated TEG in the firing region is of course not evident to the skilled in the art people and this is why applications of the ones described by our application are not available in the industry and not described or proposed in the literature.
Our claim 6 concerns TEG, not clean air as Sturgill, generated by an independent turbine, and not a turbine dependent by the process as the one used by Sturgill. As such Sturgill does not discloses the limitations of our claims.
The system of Sturgill cannot be modified to include exhaust gases coming from a turbine or another EGD. For modification, a completely different flow sheet is needed from the ones presented by Sturgill. Moreover the advantages claimed by Sturgill are then exhausted.
It is obvious that in our application a typical commercial turbine is used whereas the system of Sturgill can be built only if a specially constructed turbine is available. The turbine of Sturgill has to be purpose built with a purpose made heat exchanger replacing the combustion chamber of the turbine. As such the system of Sturgill is difficult if not impossible to be built and operate.
Oxygen enhancement of the TEG is not an inventive step in our application. What we claim in our claim 6 is a modification of our claim 1 i.e. the oxygen enhancement of the TEG as used in claim 1 i.e. the upgrading of the TEG temperature and the use of all of it in the combustion room.